

“WHAT DID YOU CALL ME?”

THE EFFECT OF MASCULINITY THREAT ON MEN AND LIKELIHOOD OF ENGAGING
IN RISK-TAKING BEHAVIORS

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By

James Kim

Thesis Committee:

Kelly Aune, Chairperson

Krystyna Aune

Jinguang Zhang

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ABSTRACT

This study examined the effects of masculinity threat on men's self-reported tendency to engage in compensatory risk-taking behaviors to reestablish their masculinity. It is hypothesized that...

In this experiment, 58 men from the University of Hawai'i at Mānoa completed the Bem Sex-Role Inventory (BSRI), and then received a threat to or confirmation of their masculinity.

Subsequently, participants completed the domain specific risk-taking (DOSPERT) survey which measured the likelihood of engaging in risk-taking behaviors. As predicted, male participants who experienced the masculinity threat of reported strong intent to engage in risk-taking behaviors than did male participants whose masculinity was confirmed. The study provided insight into men's value of their masculine identity, and when their masculinity was threatened, men were willing to engage in risk-taking compensatory behaviors to reestablish their masculinity.

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CHAPTER 1

INTRODUCTION

At least in the American culture, masculinity is a highly valued trait among men; to be perceived as masculine is an all-encompassing goal among many men (Gilmore 1990; Vandello & Cohen, 2003). Masculinity is often glorified, while feminine traits among men are often derogated (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). Being perceived as masculine has been sought after by men because of the positive connotations that typically are associated with masculinity (e.g., assertiveness, physical strength, competitiveness, confidence, and risk-taking). In comparison, traits typically associated with femininity, e.g., nurturing, gentleness, and submissiveness, are often avoided by men for fear that exhibiting these traits threaten men's perceived masculinity.

In order to be perceived as masculine, men often publicly display their masculinity to reinforce perceptions that they are "man enough" (Tversky & Kahneman, 1992). To the extent that men fail to be perceived as masculine, the consequences can be serious. Men who are not satisfied with their perceived masculinity often display lower self-esteem (see Antill & Cunningham, 1979), are more likely to engage in aggression (Murnen, Wright, & Kaluzny 2002), and show a greater need to publicly display their masculine traits to reinforce their masculinity (Tyversky & Kahnerman, 1992). These consequences result from the tendency for men to link their gender identity of which the degree of masculinity and femininity are key components more closely to their social identity than do women (citations).

In contrast, gender contraventions are more tolerated in women than men (Bradley & Zucker, 1997). Women who are perceived to have stereotypically masculine traits (e.g., confidence, physical strength) are not necessarily perceived negatively and may even be

perceived positively by others; however, men who are perceived to display stereotypically more feminine traits (e.g., uncertainty, less physical strength) are more likely to be judged harshly (Bradley & Zucker, 1997).

Men are not only afraid of being perceived as not man enough, but are also afraid of being labeled as homosexual (Willer, Conlon, Rogalin, & Wojnowicz, 2013). When men or women behave in a manner that is not perceived to be consistent with their stereotypical gendered identities, it is more frequently the men who will be diagnosed with Gender Identity Disorder (Zucker et al., 1997). Since men are afraid of being perceived as gender deviant or labeled as homosexual (Duggan & McCreary, 2004), men are more motivated to reject feminine traits in order to maintain a more acceptable social identity (Berdahl, Magley, & Waldo 1996; Glick, Gangl, Gibb, Klumpner, & Weinberg 2007; Schmitt and Branscombe, 2002; Vohs, Baumeister, & Ciarocco, 2005).

Further, even when a perception of masculinity has been achieved, that perception is still socially precarious; perceptions of masculinity must be perpetually reinforced. Men continually need to “prove” their masculinity since perceived masculinity is always vulnerable to potential threats (Vandello et al., 2008). When perceptions of a man’s masculinity are threatened, research (to be reviewed below) suggests that a man will often attempt to reestablish his perceived masculinity by overcompensating in displays of, for instance, physical strength, aggression, or other stereotypically masculine traits. Vendello et al. (2008) found that men attempted to reestablish their masculinity by engaging in a more physical task (punching a bag) than a task that was less physical (playing basketball) following a masculinity threat. Other studies reviewed in this paper reinforce the assertion that men attempt to reestablish their threatened masculinity when by engaging in stereotypically masculine behaviors.

The present paper examines the value of precarious masculinity in the U.S., the effects of threats to perceptions of masculinity, and discusses how men attempt to reestablish their masculinity by engaging in displays associated with perceptions of masculinity. In particular, we will look at how threats to perceptions of men's masculinity can lead to increases in likelihood of engaging risk-taking behaviors in order to reestablish perceived masculinity.

CHAPTER 2

PRECARIOUS MASCULINITY

Scholars argued that men across cultures are typically measured against a standard of hegemonic masculinity (Connell, 1990). The term hegemonic masculinity is used to refer to the most socially accepted and respected conception of masculinity in a given culture, ultimately setting the standard of a particular set of desirable behaviors in men in that culture (Carrigan, Connell, & Lee 1985; Connell 1988). Across various cultures including the U.S., characteristics such as competitiveness, assertiveness, physical strength, aggression, risk-taking, courage, heterosexuality, and lack of feminine traits are perceived as the ideal masculinity (Connell & Messerschmidt, 2005; Schrock & Schwalbe, 2009).

Gilmore (1990) describes the transition from boy to man as “not a natural condition that comes about spontaneously through biological maturation but rather (it) is a precarious or artificial state that boys must win against powerful odds” (p.11). In many cultures, masculinity is like status, frequently earned through volitional tasks and behaviors (Gilmore, 1990).

Conversely, femininity is typically earned through physical or biological milestones that are typically the developmental products of physical maturity (e.g., becoming fertile, developing breasts) (Vandello et. al., 2008; Vandello & Cohen, 2008). In other words, perceptions of a man’s masculinity can easily be threatened or lost through social transgressions and shortcomings. For instance, a study by Vandello et al. (2008) examined social transgressions and asked students “to explain how a person might lose his manhood.” The students had very little difficulty generating responses for a man’s gender shortcomings. The majority of the responses included “losing a job,” “being unable to support a family,” and “letting others down.” On the other hand, because a woman’s perceived femininity is typically associated with physical and

developmental traits, transgressions and short-comings provide less of a threat to perceptions of her femininity (Bosson, Vandello, Burnaford, Weaver & Wasti, 2009). Conversely, when students were asked to generate responses for how a woman might lose her womanhood, the students found it more difficult generating responses to that request. The students responded with only a few social reasons and ultimately turned to physical and biological explanations of how a woman might lose her perceived femininity. These included “having a hysterectomy” or “getting a sex-change operation.” This finding suggests that masculinity is precarious relative to femininity (Bosson et al., 2009).

Explanations for the precariousness of masculinity can be invoked from an evolutionary perspective (Buss & Kenrick, 1998). The precariousness of masculinity can be traced back to the evolved adaptations of a social environment in which men often competed in public to portray their dominance and physical strength (Buss & Schmitt, 1993; Geary & Bjorklund, 2000). During these public demonstrations, men would endeavor to improve their status which would make them more attractive to potential female mates. This in turn increased the likelihood that men would be able to pass on their genes (Kenrick & Luce, 2000).

Because a man’s social status was never secure, a man could find his status challenged at any given time by a male rival (Bosson et al., 2009). Consequently, men adopted the abilities to quickly identify social cues indicating a potential threat to their masculinity and engage in behaviors to maintain or reassert their masculinity. Conversely, women’s reproductive success was less reliant on their social status because women typically did not have to prove their strength or dominance in public in order to attract potential mates. Rather, women’s success at attracting mates relied more on the physical features indicative of reproductive health (Kenrick & Luce, 2000).

Another explanation for men's persistent displays of masculinity is offered by biosocial theories (Eagly & Koenig, 2006). Past research suggests that men's and women's social roles have long existed as a function of division of labor (Wood & Eagly, 2002). Men often occupied physically demanding social roles that involved seeking resources and engaging in strenuous labor. Consequently, men's lifestyles often involved "competitiveness, defensiveness, and constant struggling to publicly prove worth and status" (Bosson et al., 2009, p. 624). In contrast, women's social roles were typically less competitive and less strength-demanding activities such as childcare and homemaking (Bosson et al., 2009). Therefore, women were rarely called upon to prove or defend their status. The belief that masculinity must be achieved and frequently reinforced can be traced back to these early role-relevant behaviors (Wood & Eagly, 2002).

The constant demand for men to reinforce their perceived masculinity creates an unfixed journey with no clear destination. Even if a man achieves the epitome of masculinity, any threat to his status can impact those perceptions. Consequently, any threat to a man's masculinity should lead to compensatory behaviors to reestablish his masculinity (Tyversky & Kahneman, 1992).

CHAPTER 3

MASCULINITY THREATS

Masculinity threats has widely been studied in relation to sexual harassment (Schwartz, Waldo, & Daniel, 2005). Sexual harassment literature has focused in part on how men respond to direct threats to their masculinity. Past research suggests that men experience a strong form of harassment when they are judged by other parties as being “not man enough” (Berdhal et al., 1996; Berhdahl, 2007). Responses to these perceived threats to masculinity can be understood by looking at social identity processes (Ashforth & Mael, 1989). Social identity processes are related to gender identity roles (i.e., masculinity, femininity), which are strongly held across contexts (Burke & Cast, 1997). In the U.S., identification with one’s gender is the primary source of social identification and self-esteem, especially for men (Good & Sanchez, 2010; Levant, 1996). Simply put, men’s gender identity is tightly associated to their social identity. Willer et al. (2013) found that individuals are more motivated to maintain identities that are highly socially valued (as is masculinity in the United States) because of the positive perceptions associated with being masculine (e.g., confident, physically strong). Therefore, men are driven to restore perceived losses in masculine gender identity when faced with feedback suggesting such losses.

Masculinity threats are not only prevalent in the U.S., but in other countries around the world as well. A study by Waldo et al. (1998) surveyed three independent U.S. samples of men (two university, one work force) and showed that 70% of men in each sample experienced at least one instance of gender-role harassment (e.g., enforcement of traditional heterosexual male gender role, negative gender-related marks, lewd comments). Similarly, data collected in Italy reflect findings consistent with those found in the U.S., suggesting that men who do not live up to stereotypical masculinity norms may face threats to their self-esteem. For instance, in the

study by Maass, Cadinu, Guarnieri, and Grasselli (2003), participants received false feedback that they scored low on masculinity tests and were thus gender deviant. This threat subsequently elicited in the participants responses such as being self-protective and aggressive.

Identity theories also provide valuable insight on masculinity reestablishment and how individuals enact and maintain identities during interactions (Willer et al., 2013). Specifically, Burke's (2004) identity control theory describes a model of the relationships between self-concept, behavior, and interactional feedback. In this model, when individuals receive information that is relevant to their identity, individuals will assess the feedback and evaluate whether the feedback is consistent with their identity. If discrepancies are detected, individuals will likely enact more extreme versions of behaviors in an effort to recover their identity. For instance, if an individual assuming a role (e.g., athlete) that was strongly associated with certain characteristics (e.g., competitiveness) received criticism that the individual failed to convey the specific trait when appropriate, the individual would likely react with an extreme form of the trait in order to restore the presentation of self. Thus, individuals responding to feedback indicating a lack of masculinity are likely to engage in behaviors associated with that aspect of their identity to the point that they will behave in ways that are extreme versions of their identity.

These theory and finding suggests that men who receive masculinity threat will also attempt to reestablish their perceived masculinity. Specifically, when a man's masculinity is threatened, he may experience emotional responses similar to those experienced by members of a socially devalued group. The negative effects from masculinity threats are consistent with the psychological effects of stigma (Kleck, 1966; Vohs & Heatherton, 2000). Members of a devalued social group are often associated with negative stereotypes and subsequently suffer negative emotions (Ben-Zeev, Talia, Fein, & Inzlicht, 2005; (Blascovich, Spencer, Quinn, &

Steele, 2001). In a recent study by Funk and Werhun (2011), the experimenters investigated the debilitating psychological impacts of masculinity threats on men's cognitive abilities. The researchers threatened the men's masculinity and found that men who were threatened performed significantly worse on the cognitive stroop assessment compared to the non-threatened group. The results suggests that men who feel threatened experience increased negative cognitions and compromised intellectual ability because masculinity threats are psychological taxing on men (Schmader & Johns, 2003; Steele & Aronson, 2004).

Other studies have focused on the level of anxiety experienced when men's masculinity was threatened. Vendello et al. (2008) found that U.S. men exhibited higher levels of anxiety and feelings of shame when they were given low masculinity scores in a mock test as opposed to men who received high scores. In the follow-up study by Vendello et al. (2008), men who experienced the masculinity threat had more word fragments associated with physical aggression as opposed to men whose masculinity was not threatened. The implications suggests that men were subconsciously thinking masculine behaviors (e.g., being physically strong) when their masculinity had been threatened by mock scores.

Research in masculinity have also investigated the perceived acceptability of men's behavioral responses to threats to their masculinity. For instance, Bosson and Vandello (2011) showed college students mock police reports in which either a man or women punched a same-sex stranger who taunted him (her) and questioned his manhood (her womanhood). Next, participants responded to items indicating the extent to which the aggressive behavior of the protagonist reflected internal causes (e.g., "the kind of person he/she is" and "his/her immaturity") or external causes (e.g., "being humiliated; "being provoked"). The results showed that when both men and women read the mock report of the female aggressor, they attributed the

aggressor's behavior to internal reasons. However, when male participants read the mock report with the male aggressor, the male participants explained the male aggressor's behavior in reference to external and situational factors that caused it. Male participants appeared to show unique sensitivity to external factors that support men's defending of their manhood with aggressive behaviors.

When a man's masculinity is threatened, research has documented compensatory behaviors in order to reestablish his gender identity (Willer et al. 2013). In the experiment, males were given mock feedback suggesting they were more feminine than they believed themselves to be. In a subsequent survey, male participants who had been given the mock feedback showed more support for war, homophobic attitudes, and interest in purchasing "masculine" cars (e.g., an SUV). This illustrates how men can react to masculinity threats with demonstrations of masculine behaviors to reestablish their masculinity. Similar results were found in a study by Cramer (1998), wherein men who were given mock results of a gender-harassing feedback from a questionnaire engaged in more defensive identification (expressing strong association with their gender group) relative to men who were given gender-consistent feedback. In sum, these studies show that masculinity threats to a man who strongly identifies with his gender will likely produce distress in that man; in turn, he will attempt to restore his perceived masculinity by engaging in behaviors associated with masculinity (Ellemers, Spears, & Doosje, 2002).

Past research has shown that men use more physically aggressive actions than do women to reestablish their perceived masculinity when threatened. (Bettencourt & Miller, 1996; Eagly & Steffen, 1986; Hyde, 2005; Knight, Guthrie, Page, & Fabes, 2002). For instance, Funk and Werhun (2011) also found that men attempted to reestablish their masculinity through the display of physical strength when their masculinity was threatened. In their study, men were

given an initial handgrip test. Subsequently the researcher provided half of the men with mock low masculine feedback scores (i.e., the threatened condition), and the other half were given mock average masculine feedback scores (i.e., the nonthreatened condition). Finally, the men were subjected to a subsequent handgrip test. The results indicate that men in the threatened condition performed significantly better at the handgrip test than did the men in the non-threatened condition. Overall, these studies show that physical strength and aggression are common demonstrations to prove a male's masculinity, especially when threatened.

CHAPTER 4

MASCULINITY AND RISK-TAKING BEHAVIORS

Risk-taking as a prevalent masculine behavior likely emerged as an outcome of male intrasexual competition (Wilson & Daly, 1985). From an evolutionary standpoint, men's fitness traits evolved through competition with other men for potential mates. Risk-taking emerged as a salient indicator of masculinity, and it is still used today. In contrast, women did not compete and take risks as often against other women to compete for mates, because women likely did not have to compete to the same extent as did men for reproductive success. Even today, competition and risk-taking play greater roles in mate selection for men than for women, and across a variety of contexts. For instance, men will engage in more gambling behaviors and with larger stakes than will women (Cornish, 1978; Newman, 1972).

Gender stereotypes also provide insight on why men engage in risk-taking behaviors (Mahalik, Burns, & Syzdek 2007). Gender stereotypes are based on characteristics and behaviors that are generally believed to be normal or typical for men or women. The dominant norms within most cultures encourage men to conform to gender stereotypes in order to avoid being the minority group. In the U.S., the dominant norm for men is to conform to the hegemonic masculinity, which is often regarded as being risk-taking, physically strong, emotionally stable, independent, confident, assertive, and rejecting of feminine traits (Kimmel, 1995). Attempting to conform to masculine stereotypes further reinforces the self-fulfilling prophecies leading to such characteristics and behaviors (Campbell & Henry, 1999; Crawford, 1995).

Men typically experience greater social pressure than women, especially when they are expected to closely identify with their gender identity (Courtenay, 2000). Women, on the other hand, experience greater flexibility in the range of gender-typed behaviors they can engage in

that are more acceptable to society. For instance, a woman demonstrating masculine traits such as being physically strong is more acceptable to society relative to a man being physically weak. This is because of a man's social pressure and beliefs about gender are more stereotypic than a woman's belief about gender stereotypes. Consequently, men are not merely passive victims to the pressure of not being "man enough;" men are frequently active agents, conditioned to react to reestablish their masculinity through, for instance, risk-taking behaviors.

Thus far, a vast body of scientific literature has confirmed that men take more risks, but fails to address how psychological processes may play a role in influencing variance in risky decision-making. One's emotional state (e.g., angry) can influence decisions in many pathways, specifically by affecting decision-making and attitude (Tversky & Kahneman, 1992; Weber et al., 2005). Specifically, risk-taking decisions are often influenced by other psychological processes as well (Figner & Weber, 2011). For the purpose of this study, a masculinity threat manipulation was employed to influence participants' perceptions of their own gender identity and served as a perceived threat to their self-image. It was expected that participants would respond with compensatory behaviors to reestablish their masculine self-image, specifically by reporting higher likelihood of risk-taking behaviors. Therefore, we proposed the following hypothesis:

H1: Men in the masculinity threatened condition will report a greater tendency to engage in risk-taking behaviors than men in the non-threatened condition.

CHAPTER 5

METHOD

Design & Participants:

The goal of this study was to test the effect of a masculinity threat on participants' reports that they would engage in risk-taking behaviors. This study employed a one-factor between-subjects design comparing men in a masculinity-threatened condition to men in a non-threatened condition on their self-reported likelihood of engaging in risk-taking behavior.

Participants were male Communicology students recruited through the SONA in exchange for course credits. A total of 58 participants in the age range of 18-27 participated in the study. Participants were randomly assigned to the threat or no-threat condition.

Materials

Bem's Sex-Role Inventory (BSRI; Bem, 1974) (see appendix A) survey served as a mock test in this study. The BSRI is used to measure one's self-reported gender role. Specifically, the survey assesses the extent to which people identify themselves as masculine, feminine, or androgynous. BSRI utilized 60 trait-based items in which participants rated themselves on a 7-point Likert scale. The trait-based items were equally distributed in the survey (i.e., 20 items on masculine traits, 20 on feminine traits, and 20 on neutral traits). Bem reported a high reliability when using these scales to test for self-reported femininity ($\alpha = .78$) and masculinity ($\alpha = .87$). In this experiment, participants were administered this instrument in order to receive a mock gender identity score identifying them as either more masculine or more feminine.

Participants were also administered the Domain Specific Risk-Taking (DOSPERT) (see appendix C) survey that measured the participant's likelihood of engaging in risk-taking

behaviors. Weber et al. (2002) have reported a coefficient alpha of 0.88 across all items from their initial study and internal consistency estimates (Cronbach's alphas) from .71 to .86.

Procedure:

Male participants were first given a demographic questionnaire and the BSRI (Bem, 1974). Following the completion of the BMRI, participants received mock score results indicating either gender identities of average male or average female (see appendix B). In the masculinity threatened condition, the participants were shown that their scores fell into the range of average female scores. In the non-threatened condition, participants received a mock score result indicating that their scores fell into the range of average male scores. The online mock scores that the participants received displayed a 0-50 scale of possible scores. The range from 0 to 25 indicated the masculine range of the feedback score, while 26 to 50 indicated the feminine range. For the manipulation, the middle of each of the ranges was marked with brackets which indicated "average male range" and "average female range."

Subsequently, participants completed the DOSPERT survey to measure their likelihood to engage in certain risk-taking domains. Participants were asked to rate 29 Likert-type items from 30 items on a seven point (1-extremely unlikely, 7 extremely likely) scale (the item "Piloting a Small Plane" was omitted from the DOSPERT survey because the item did not appropriately suit the demographics of the participants). Cronbach's alpha for the 29-item DOSPERT survey was .94 indicating a high reliability. Following the completion of the DOSPERT survey, participants were shown a disclaimer indicating that the gender identity scores that they have received were mock scores.

CHAPTER 6

RESULTS

The hypothesis stated that men in a masculinity threatened condition will report a greater tendency to engage in risk taking behaviors than will men in the non-threatened condition. An independent samples t-test was conducted to compare the likelihood of engaging in risk-taking behaviors in the masculinity threatened condition and the masculinity non-threatened condition. The analyses revealed that there was a significant difference in the scores for the threatened condition ($M = 4.36$, $SD = 1.25$) relative to the non-threatened condition ($M = 3.84$, $SD = .96$); $t(58) = -1.82$, $p = .035$ (one-tailed test); $d = .24$. These results are consistent with the reasoning that the masculinity threat had a significant effect on men on and their reported likelihood of engaging in risk-taking behaviors.

CHAPTER 7

DISCUSSION

Reestablishing Masculinity

In this study, we investigated the psychological impact of a masculinity threat and men's reported likelihood of engaging in risk-taking behaviors in order to reestablish their masculinity. The literature presented in the beginning of this study showed that masculinity is both precarious and often glorified, and men's masculinity can be challenged at any given time. Men whose masculinity is threatened emphasizes the compensatory behavior to recover one's gender identity as a result to prove their manhood. We have argued that acts of risk-taking can be understood as a response to masculinity threats. The results from the experiment suggests that participants in the threatened conditioned attempted to restore their masculine identity by scoring higher on the DOSPERT risk-taking survey. Participants who received the mock gender identity score that fell

in the range of scores for an average male, i.e., the non-threatened conditioned, did not have to reestablish their masculine identity relative to the threatened group and scored significantly lower on the DOSPERT survey. Consistent with the perspective that masculinity threats are psychologically harmful, the masculinity threat caused men to attempt to reestablish their masculine identity by reporting higher likelihood of engaging in risk-taking behaviors.

Implications

In this study, we measured risk-taking as a single measurement of likelihood of engaging in risk-taking behaviors. However, current research have confirmed that risk-taking can be measured by different domain fields (Blaise & Weber, 2006). In other words, one who engages in health risk-taking activities does not necessarily mean one will engage in financial risk-taking situations. Although we predicted that the masculinity threat would serve as a powerful psychological response, further consideration of the relationship between the masculinity threat and DOSPERT questionnaire suggests other interpretations in various risk-taking domains such as Health/Safety, Finance, Ethics, and Recreation, which we will explain next.

In our study, participants were asked several questions related to likelihood of engaging in health/safety risk-taking behaviors such as “Drinking heavily at a social function” and “Engaging in unprotected sex.” Past studies have shown that men engage in dangerous health risk-taking activities to prove their manhood. The results from this study found that men in the threatened conditioned scored significantly higher ($M = 4.10$, $SD = 2.25$) than the participants in the non-threatened condition ($M = 3.76$, $SD = 2.25$) for the item “Drinking heavily at a social function”. These results are consistent with past studies in alcohol and masculinity. For instance, Peralta (2007) found that men use public drinking to express a form of masculinity. Since heavy drinking is associated with being “courageous”, men tend to engage in this risk-taking behavior

because it is indicative of masculinity. In Peralta's (2007) experiment, students' were asked series of questions in regards to social drinking in college (e.g., How do you feel about getting drunk? What do you think about students who drink very little or who abstain"?). The responses consistently found that alcohol use among men in the U.S. was a representation of hegemonic masculinity. Furthermore, several participants in the study also described their experience with drinking alcohol as a competition amongst other men to prove their manhood. Other participants also mentioned that if a man is not able to withstand intoxication, the man likely represents feminine traits. Although there is a lack of specific research regarding masculinity and impact of unprotected sex, past studies suggest that men who strongly believe in masculine held ideologies (e.g., dominance, competitiveness) are more likely to engage in unprotected sex and intimate partner violence (Santana, Decker, La Marche, & Silverman 2006). These findings suggest that men are willing to risk their own health to prove their masculinity to others by engaging in extremely risky behaviors.

Finance risk-taking has also been studied in the realm of masculinity. In our study, participants were asked several likelihood of engaging in finance risk-taking behaviors (e.g., "Betting a day's income at a high-stake poker game."). Many past studies suggest that there are some connections between masculinity and finance risk-taking behaviors. For instance, men who conform to masculinity ideologies typically take more financial risks within their lives (Weaver, Vandello, & Bosson 2013). In Weaver's et al. (2013) experiment, participants' masculinity were threatened or not threatened (applying feminine scented hand lotion vs. testing a power drill) followed by a gambling game activity. The results revealed that the threatened group often placed higher bets and riskier bets overall compared to the non-threatened group. In addition, men in the threatened condition often selected immediate rewards based on a questionnaire (e.g.,

“Would you prefer to get \$100 tomorrow, or \$300 in 90 days?”). These findings suggest that masculinity threats may trigger impulsive finance decisions and short-term financial gain in order to restore one’s masculinity. Although this study did not specifically investigate masculinity threats and its effect on engaging in financial risk-taking behaviors, we expect to yield similar results in future secondary studies in the finance domain.

In this study, participants were asked several questions in likelihood of engaging in unethical and recreational risk-taking behaviors (e.g., passing off somebody else’s work as your own). Currently, there is a lack of research in masculinity threats and its effect on likelihood of engaging in unethical and recreational risk-taking behaviors. A recent study by Kobayashi and Fukushima (2012) by found that men were likely to commit more academic cheating than females. Since masculinity is often emphasized as being assertive and competitive, men are pressured to engage in this type of unethical behavior. Other studies focused on masculinity and its relation to infidelity. Chuick (2009) found that men who identify closely with societal masculine social norms (e.g., risk-taking behaviors, dominance of others, and seeking of status) engage in infidelity more than women. The implications from these studies are in accordance with popular masculine held beliefs, and that men are willing to take risks in order to achieve this masculine identity.

A few studies indirectly investigated the effects of masculinity threats and likelihood of engaging in recreational risk-taking behaviors. For instance, Bossen et al. (2009) found that men whose masculinity were threatened selected the more violent activity (hitting a punching bag) when threatened whereas the non-threatened masculine group engaged in the non-violent basketball activity. In addition, men whose masculinity was threatened hit the punching bag harder than the men whose masculinity was not threatened. The implications of this study

suggest that men whose masculinity are threatened may have a higher likelihood of engaging in recreational risk-taking activities when given the opportunity. Although the studies did not directly focus on masculinity threats and likelihood of engaging in unethical risk-taking behaviors, we expect to find similar results based on the supporting research. Future research must specifically investigate the ethics and recreation risk-taking domains in order to yield scientific conclusions.

Limitations

First, small sample sizes were a limitation to this study. Larger sample sizes are needed in order to produce more reliable results while protecting the participant's psychological well-being. Therefore, we recommend disclosing the administration of the masculinity threat at the end of each experiment in order to prevent psychological harm to the participants. Second, self-report responses may have affected the validity of this study. Often times self-report data collection can cause social-desirability bias where participants may answer the questions untruthfully to portray themselves as socially acceptable which may skew the results. Lastly, a manipulation check should be implemented to ensure that the manipulation served its purpose. For instance, Funk and Werhun (2011) utilized the Statements Test to ensure that the manipulation served as a significant masculinity threat (Kuhn & McPartland, 1954). Participants were asked to create eight different responses to the statement, "I am...". The responses were analyzed for the number of responses relating to the identification of being a male. Participants' who identified with being a male responded with *I am a man...I am a brother... I am a son*. The responses were recorded to generate a mean score for the male identification for the test.

Future Research

Future research should focus on the effects of masculinity threats from different sources at the interpersonal level. We suspect that men will reestablish their gender identity differently dependent upon who administered the threat. A supporting study by Palomaki, Yan, Modic and Laakasuo (2016) found that men tend to bluff more when faced against a female avatar than a male avatar. In addition, male participants engaged in more hands and competitive behavior (e.g., betting, re-raising) when matched against a female avatar. The researchers argued that women are deceived more often than men due to their perceived lack of competence in the poker game. Although the study did investigate masculinity threats directly, we believe that the implications of this study suggests that men may feel more threatened when matched against a female compared to male. Therefore, we recommend future tests to compare and measure the magnitude difference of the masculinity threat from both male and female sources.

Research in masculinity threats and the effects on the physiological processes is now being expanded (e.g., testosterone, dopamine). Current research by Taylor (2014) focused on men and their physiological responses to masculinity threats based on social influence in small groups. Male participants were randomly separated into small four-person groups of varying sex compositions and asked to work on problem-solving tasks while being video-taped. Independent assessors evaluated the interaction between the male participant and his group members. Following, the researcher measured the hormone cortisol of the male participant assigned to the group. Cortisol is a hormone produced by the adrenal cortex and serves as a physiological stress response. The results revealed that the men who lacked social influence over the all-male groups exhibited a powerful stress response of elevated levels of cortisol compared to the men who had established social influence over the men in their small groups respectively. Furthermore, the

results found that women did not exhibit a significant cortisol response from a loss of social influence, nor did men working with women in small groups. The implications of the study suggest that men whose masculinity is threatened exhibit a powerful stress response when lacking social influence over other men. Therefore, we predict to find other physiological stress responses such as changes in testosterone levels in future masculinity threat studies.

Currently, there is a lack of practical implications of masculinity threats and aggression towards one's intimate partner. Past research has focused primarily on selection of violent activities versus non-violent activities when a man's masculinity is threatened. However, there is a lack of research in practical violence towards others or one's intimate partner when a man's masculinity is threatened. Recent research by Reidy, Berk, Gentile, and Zeichner (2014) investigated the extent of men who supports the social norms of being masculine as likely being more violent towards their intimate partner. In addition, men who suffer from occupational stressors such as a demotion, job termination, or trouble with superiors struggle with a threat to their masculinity. The implications of this study suggests men who highly value their masculinity often emerge as predictors as abuse towards their female partner. These findings are in line with current research that men who perceive themselves as highly masculine in their own gender identity will likely engage in more extreme compensatory behaviors.

Conclusion

Ultimately, our study suggests important implications for men who experience masculinity threats and what lengths men are willing to go to reestablish their masculinity. Early as newborns, society categorizes men and women with stereotypical pressures such as giving male infants a blue blanket and a toy truck and females a pink blanket with a Barbie doll. The pattern continues into adolescence, when males are typically faced with even more pressure to be

perceived as masculine through their actions. At this point, men are presented with opportunities to engage in risk-taking behaviors to confirm their own masculinity or reestablish their masculinity when threatened. Although the study only measured the reported likelihood of men engaging in risk-taking behaviors when their masculinity is threatened, the stakes will be higher to the extent that these responses are indicative of the likelihood of engaging in real-world risk-taking behaviors. Undoubtedly, men feel constant pressure of upholding their masculine gender identity, therefore, we need to create awareness and break societal norms of what is deemed masculine and feminine in order to protect men from ultimately destroying themselves.

APPENDIX A

Bem Sex Role Inventory: Gender Identity Survey

This test is a way of judging how masculine or feminine you are. For each item answer the question, "How does the term best fit you?" according to the following scale:

- 1 = Never or Almost Never True
- 2 = Usually Not True
- 3 = Sometimes but Infrequently True
- 4 = Occasionally True
- 5 = Often True
- 6 = Usually True
- 7 = Always or Almost Always True

Questions:

- | | | |
|-----------------------------------|--------------------------------------|-----------------------------|
| 01. Acts as a leader | 21. Feminine | 41. Makes decisions easily |
| 02. Adaptable | 22. Inefficient | 42. Shy |
| 03. Affectionate | 23. Defends own beliefs | 43. Masculine |
| 04. Conceited | 24. Receptive to Flattery | 44. Solemn |
| 05. Aggressive | 25. Dominant | 45. Soft-spoken |
| 06. Cheerful | 26. Jealous | 46. Tactful |
| 07. Ambitious | 27. Gentle | 47. Self-reliant |
| 08. Conscientious | 28. Likable | 48. Sympathetic |
| 09. Childlike | 29. Forceful | 49. Self-sufficient |
| 10. Conventional | 30. Gullible | 50. Theatrical |
| 11. Analytical | 31. Has leadership abilities | 51. Tender |
| 12. Compassionate | 32. Moody | 52. Truthful |
| 13. Assertive | 33. Loves children | 53. Strong personality |
| 14. Friendly | 34. Reliable | 54. Understanding |
| 15. Does not use harsh language | 35. Independent | 55. Willing to take a stand |
| 16. Happy | 36. Loyal | 56. Unpredictable |
| 17. Athletic | 37. Individualistic | 57. Warm |
| 18. Eager to soothe hurt feelings | 38. Secretive | 58. Unsystematic |
| 19. Competitive | 39. Sensitive to the needs of others | 59. Willing to take risks |
| 20. Helpful | 40. Sincere | 60. Yielding |

APPENDIX B

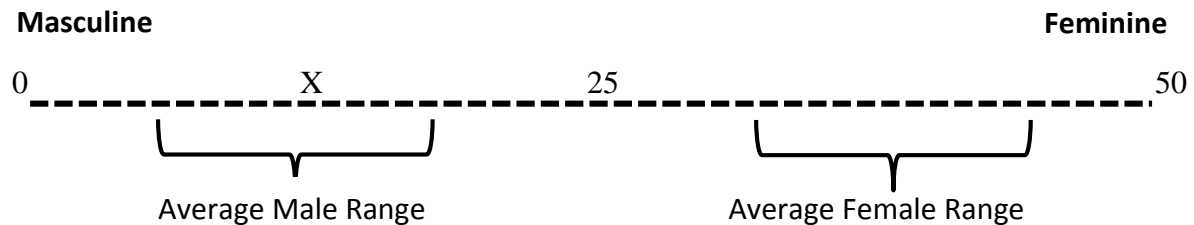
*Note to IRB: Participants will receive either “average male range scores” or “average female range scores”.

Gender Identity Survey Feedback

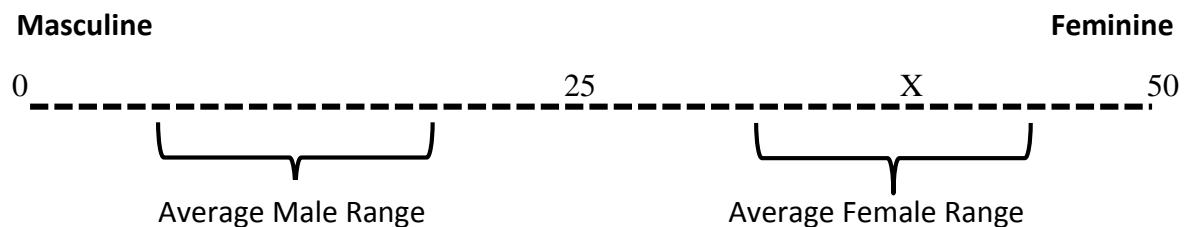
The following is your score on the gender identity survey. It has been placed on a 0 to 50 index running from “Masculine” to “Feminine.” Those lower on the scale have more masculine gender identities, those higher on the scale have more feminine gender identities.

Your Score: 13

Below is a line graph of average score for men and women on the Gender Identity Survey. We have indicated your score with an “X” on the line.



Your Score: 38



APPENDIX C

Domain-Specific Risk-Taking Scale

For each of the following statements, please indicate the likelihood that you would engage in the described activity or behavior if you were to find yourself in that situation. Provide a rating from *Extremely Unlikely* to *Extremely Likely*, using the following scale:

1	2	3	4	5	6	7
Extremely	Moderately		Somewhat	Not Sure	Somewhat	
Moderately		Extremely				
Unlikely	Unlikely		Unlikely		Likely	
Likely	Likely					

1. Admitting that your tastes are different from those of a friend. (S)
2. Going camping in the wilderness. (R)
3. Betting a day's income at the horse races. (F)
4. Investing 10% of your annual income in a moderate growth mutual fund. (F)
5. Drinking heavily at a social function. (H/S)
6. Taking some questionable deductions on your income tax return. (E)
7. Disagreeing with an authority figure on a major issue. (S)
8. Betting a day's income at a high-stake poker game. (F)
9. Having an affair with a married man/woman. (E)
10. Passing off somebody else's work as your own. (E)
11. Going down a ski run that is beyond your ability. (R)
12. Investing 5% of your annual income in a very speculative stock. (F)
13. Going whitewater rafting at high water in the spring. (R)
14. Betting a day's income on the outcome of a sporting event (F)
15. Engaging in unprotected sex. (H/S)
16. Revealing a friend's secret to someone else. (E)
17. Driving a car without wearing a seat belt. (H/S)
18. Investing 10% of your annual income in a new business venture. (F)
19. Taking a skydiving class. (R)
20. Riding a motorcycle without a helmet. (H/S)
21. Choosing a career that you truly enjoy over a more prestigious one. (S)
22. Speaking your mind about an unpopular issue in a meeting at work. (S)
23. Sunbathing without sunscreen. (H/S)
24. Bungee jumping off a tall bridge. (R)
25. Walking home alone at night in an unsafe area of town. (H/S)
26. Moving to a city far away from your extended family. (S)
27. Starting a new career in your mid-thirties. (S)
28. Leaving your young children alone at home while running an errand. (E)
29. Not returning a wallet you found that contains \$200. (E)

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